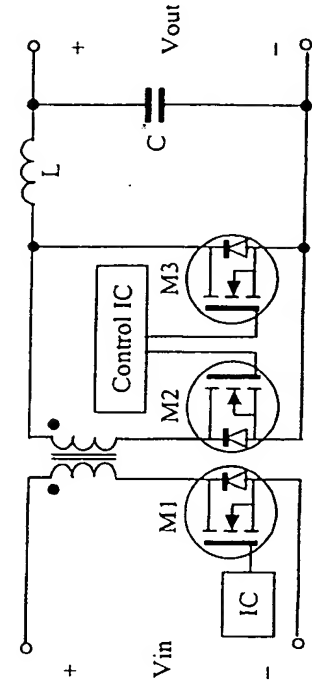
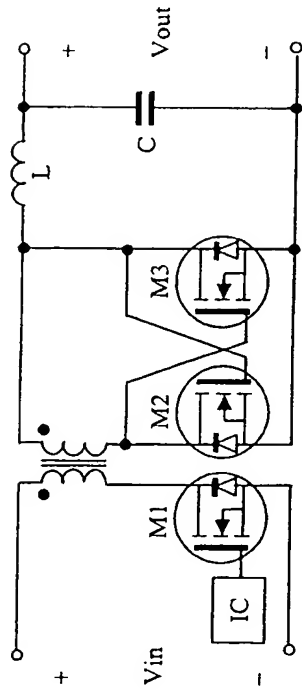


Figure 1



IC-driven synchronous rectification
 isolated forward converter

1 B



Self-driven synchronous rectification
 isolated forward converter

1 A

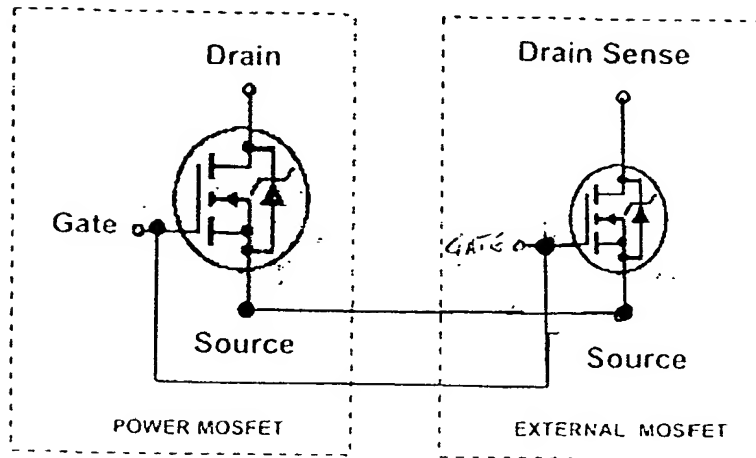


FIG. 2

Figure 3

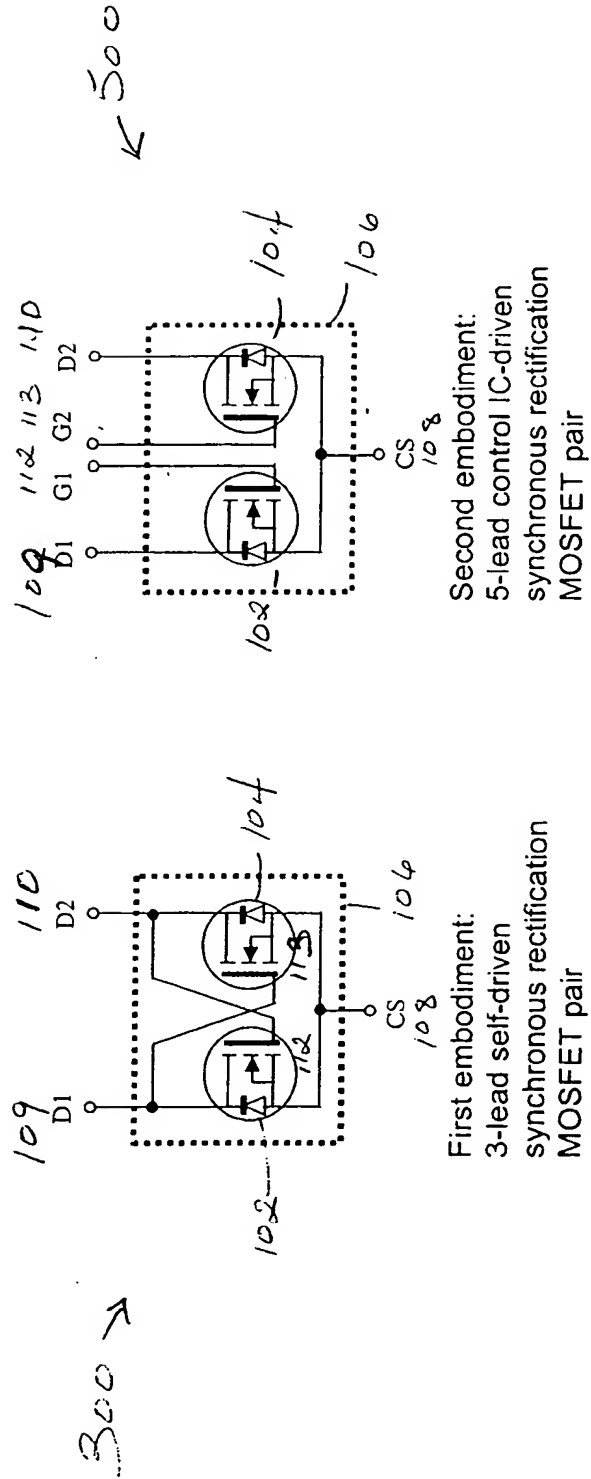


Figure 3a

Figure 3b

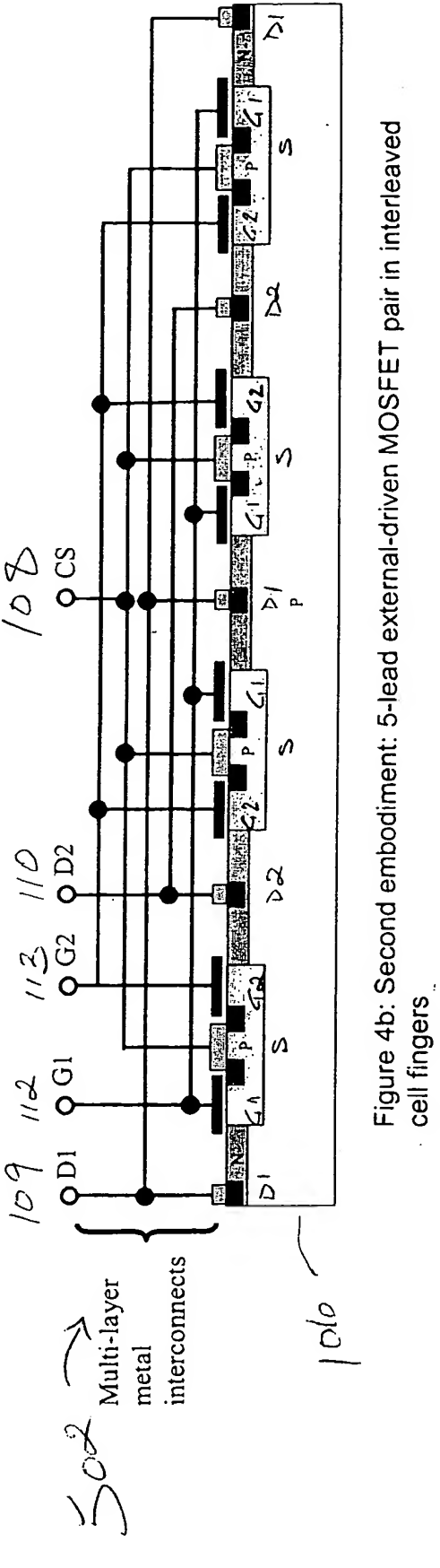
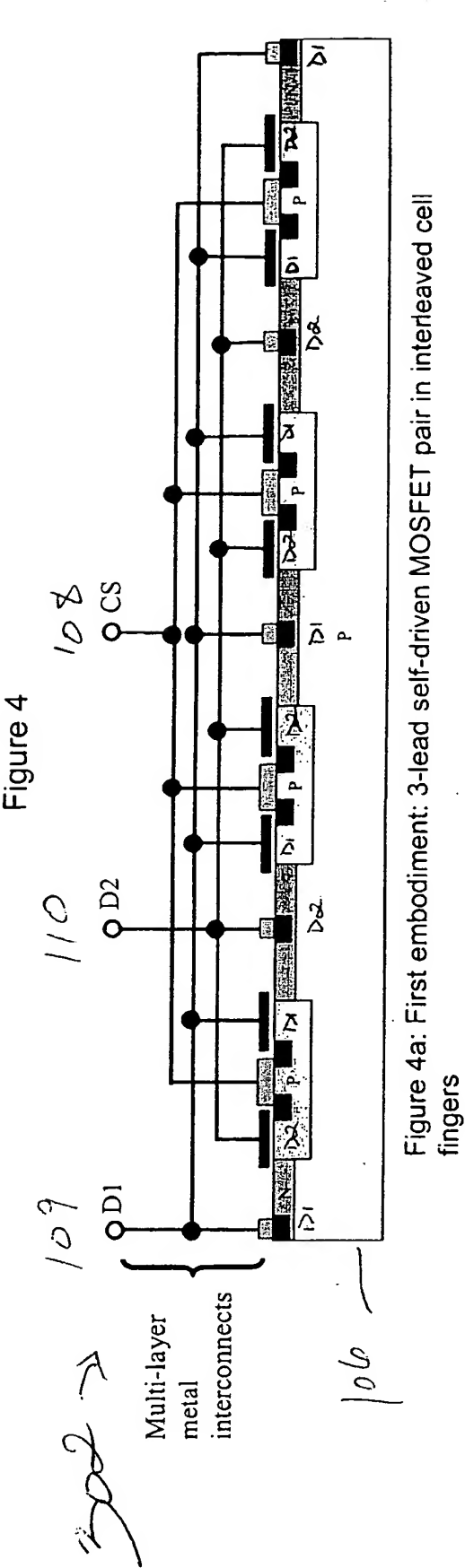


Figure 5

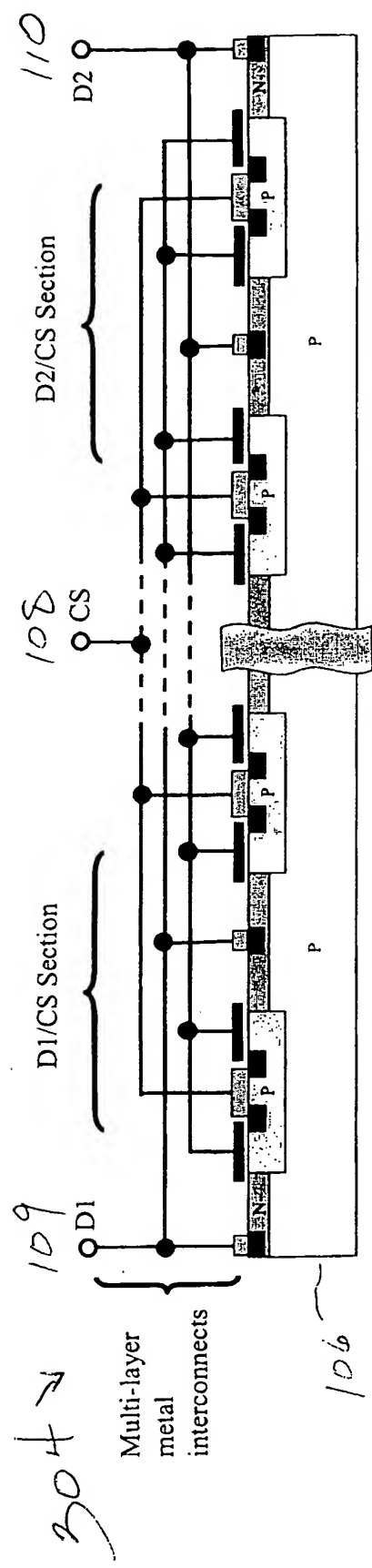


Figure 5a: Third embodiment: 3-lead self-driven MOSFET pair in separate cell sections

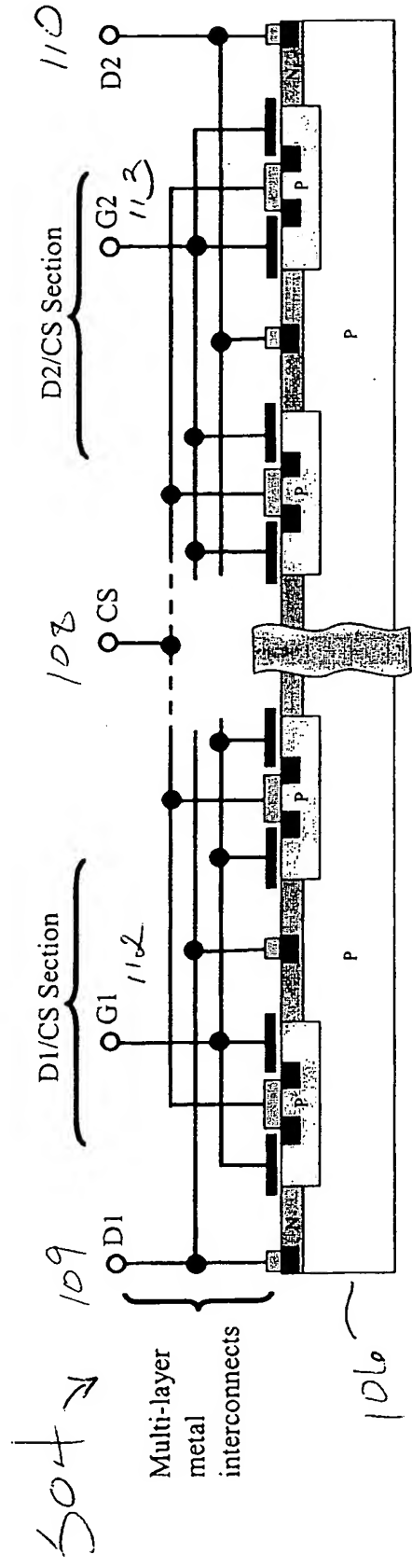
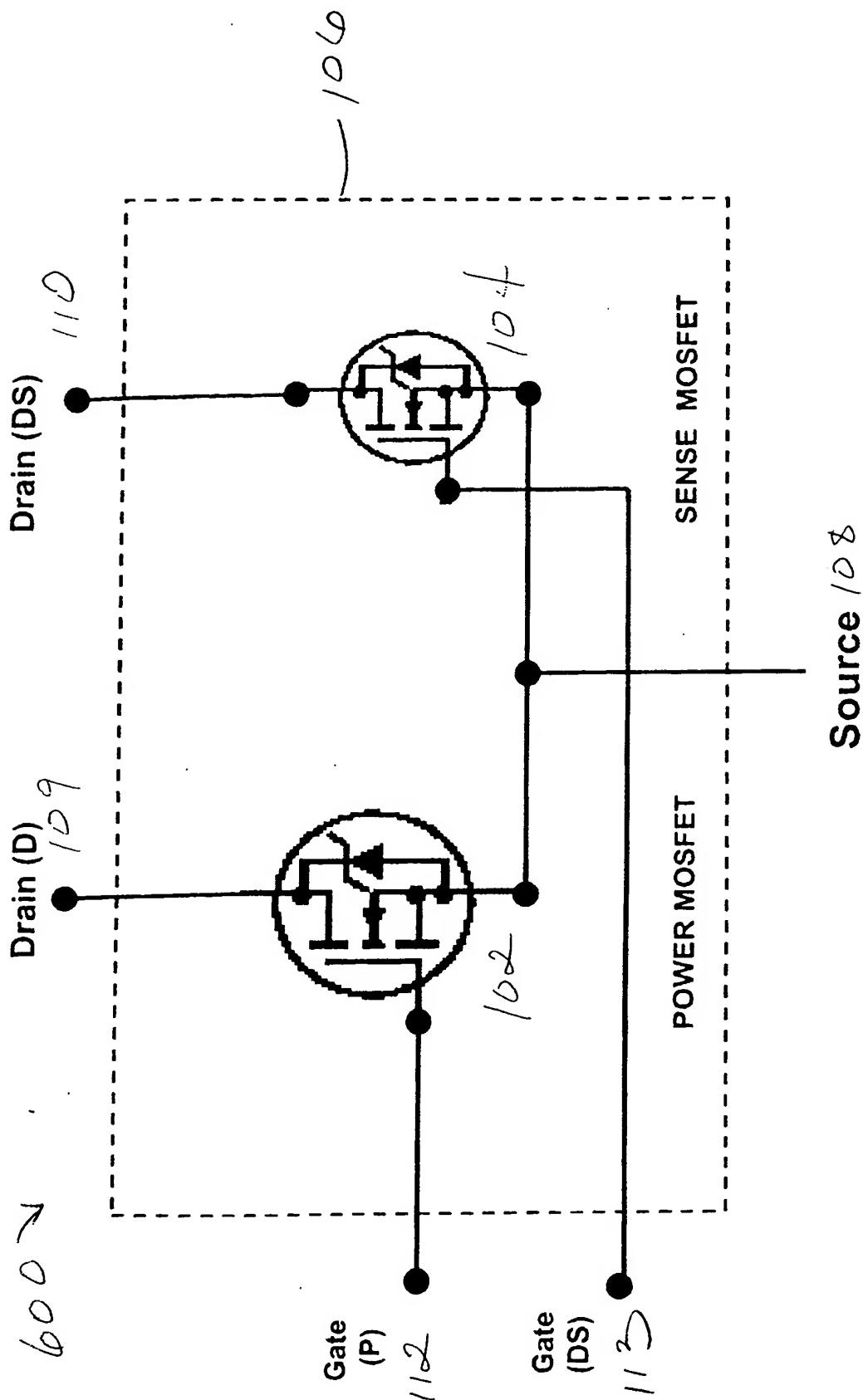


Figure 5b: Fourth embodiment: 5-lead external-driven MOSFET pair in separate cell sections

1. Discrete power semiconductor device comprised of multiple transistors with common Source connection with one or more transistors having electrically isolated Drain and Gate connections



1. Discrete power semiconductor device comprised of multiple transistors with common Source connection with one or more transistors having electrically isolated Drain and Gate connections

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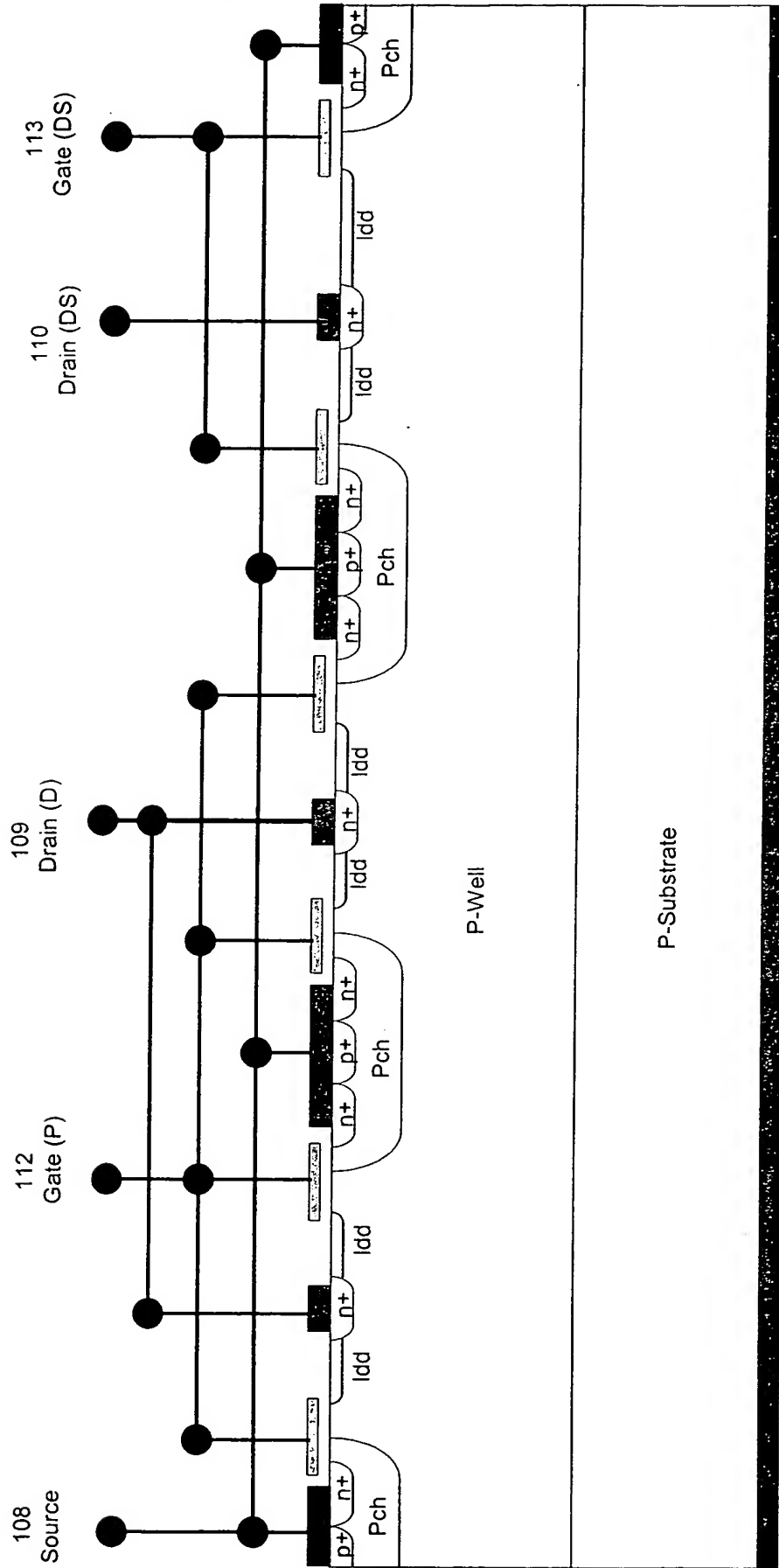


Figure 7

Cross-Sectional Diagram of a Power MOSFET With Integrated Drain Sense

- Discrete power semiconductor device comprised of multiple transistors with common Source and Gate connections with one or more transistors having electrically isolated Drain connections

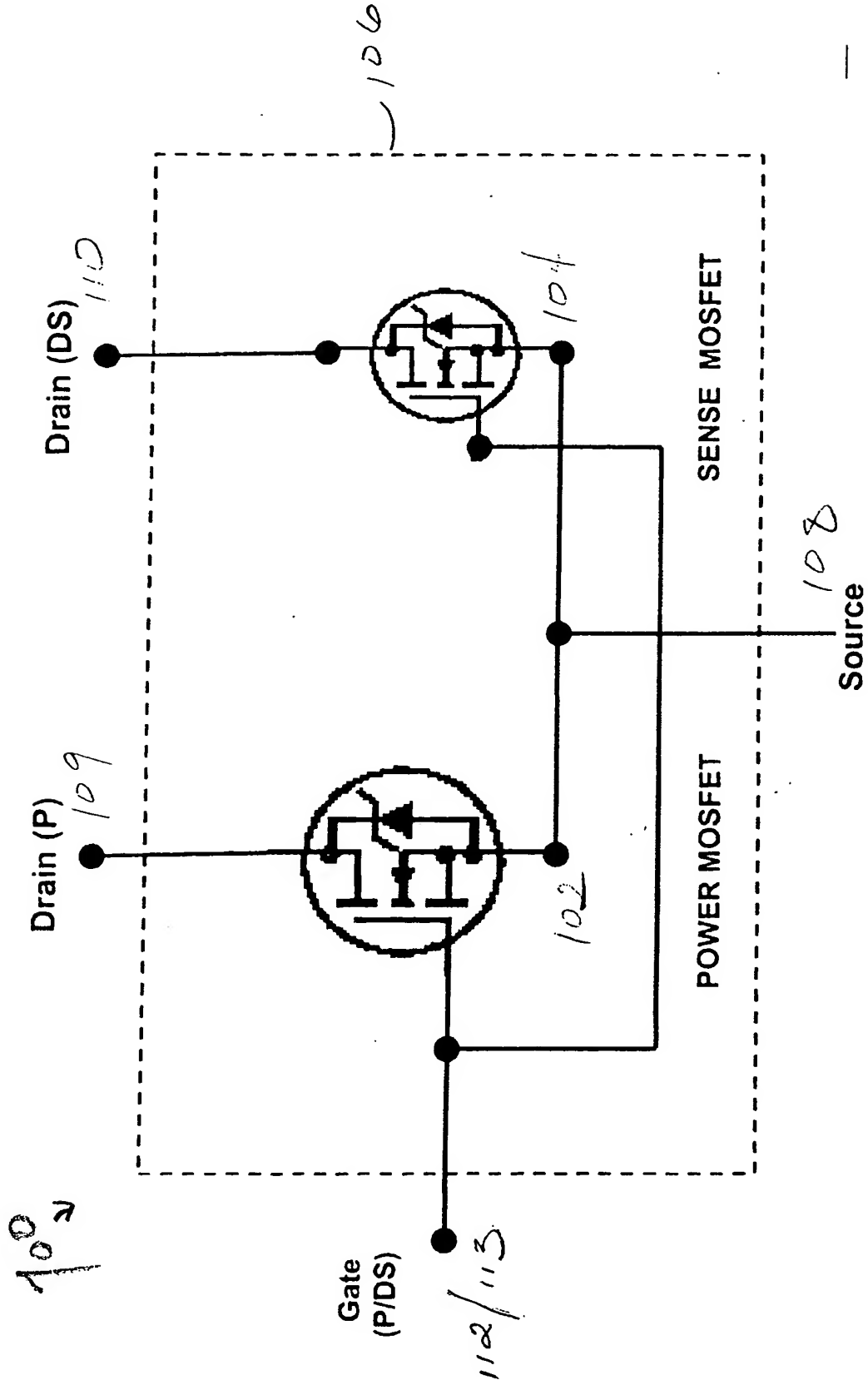


FIG 8

Title: Monolithic Power Semiconductor Structures
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2. Discrete power semiconductor device comprised of multiple transistors with common Source and Gate connections with one or more transistors having electrically isolated Drain connections

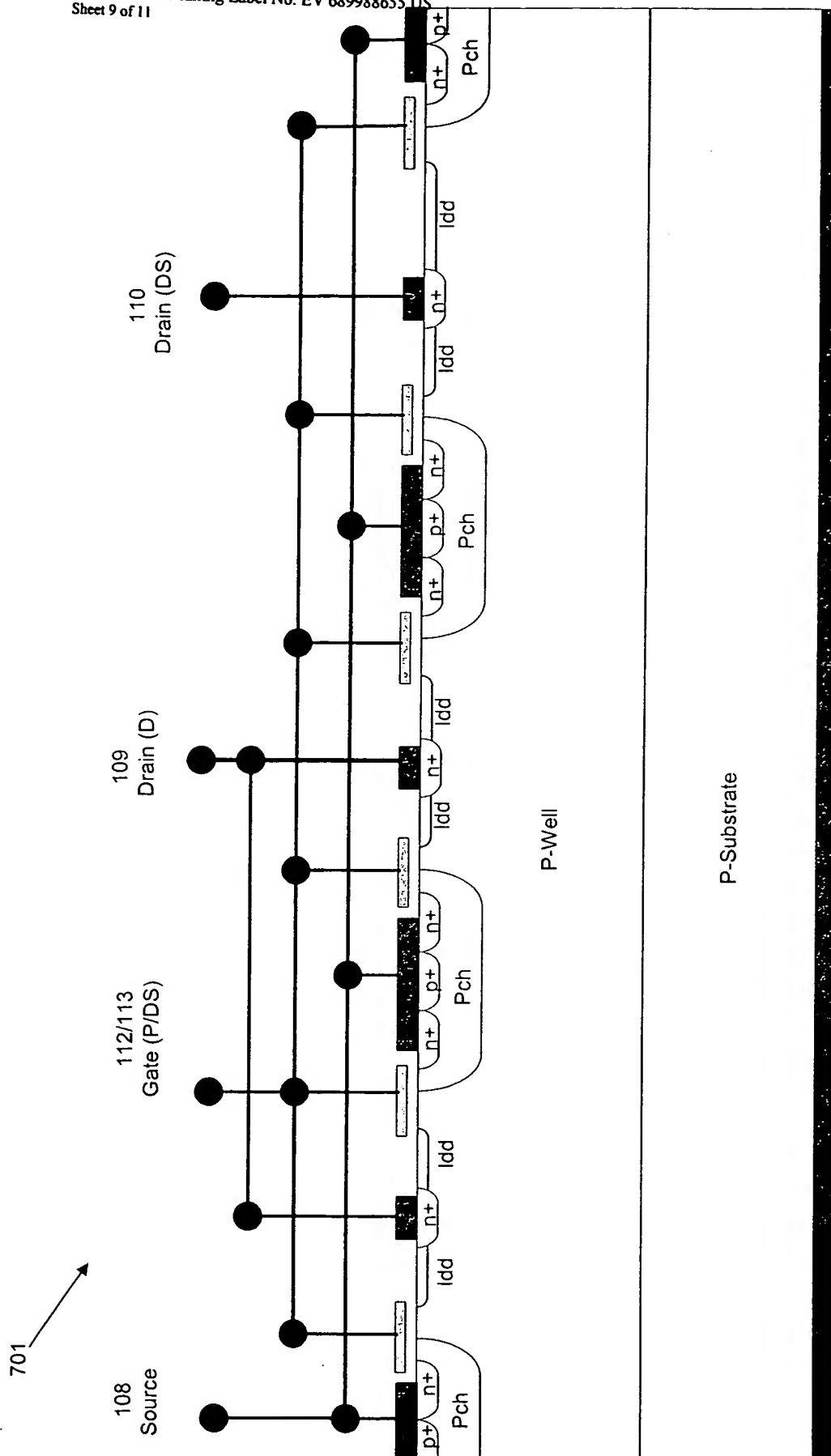


Figure 9
Cross-Sectional Diagram of a Power MOSFET With Integrated Drain Sense

3. Discrete power semiconductor device comprised of multiple transistors with common Source and Gate connections with one or more transistors having substantially different threshold voltages and electrically isolated Drain connections

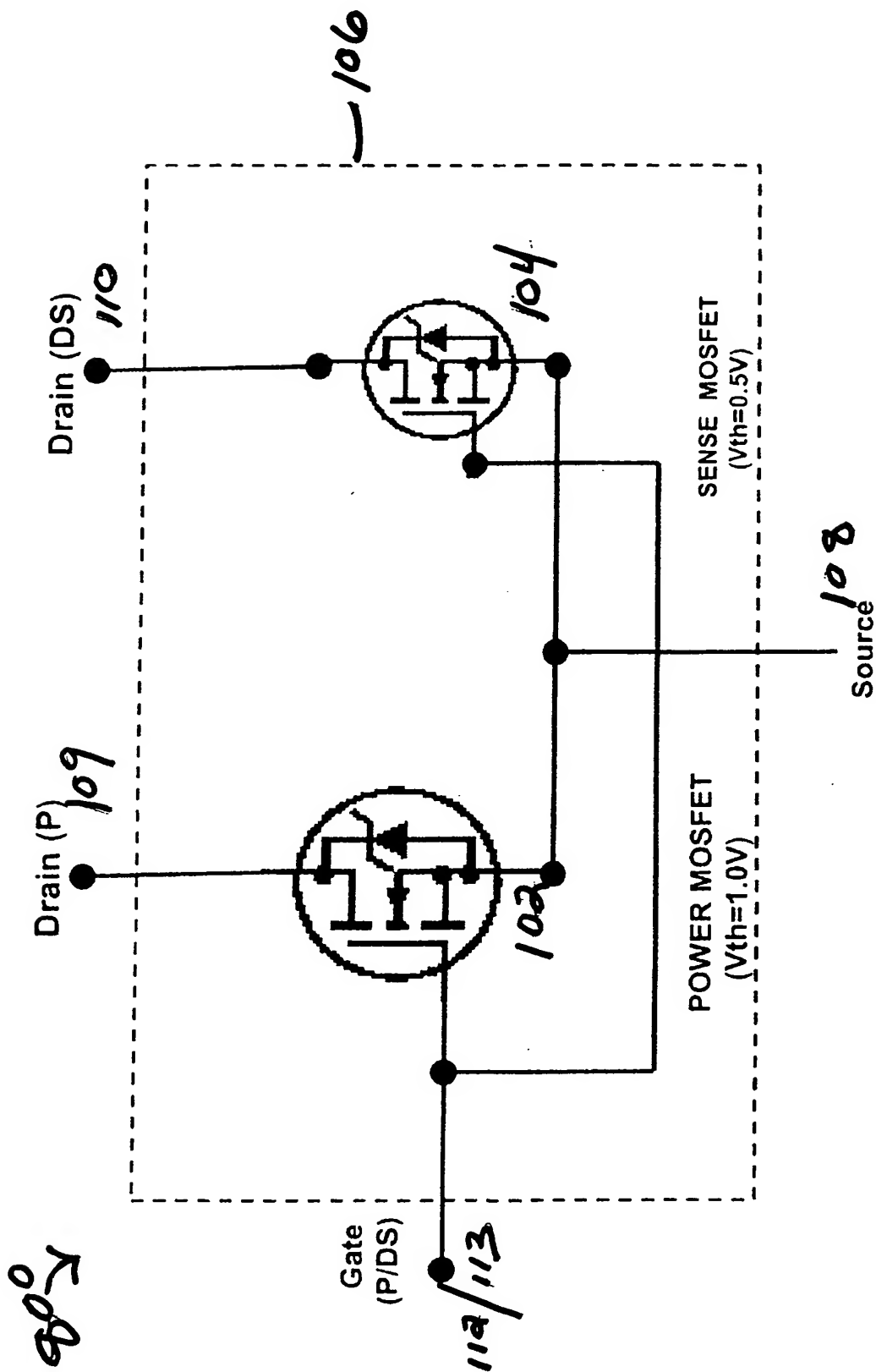


FIG. 10

3. Discrete power semiconductor device comprised of multiple transistors with common Source and Gate connections with one or more transistors having substantially different threshold voltages and electrically isolated Drain connections

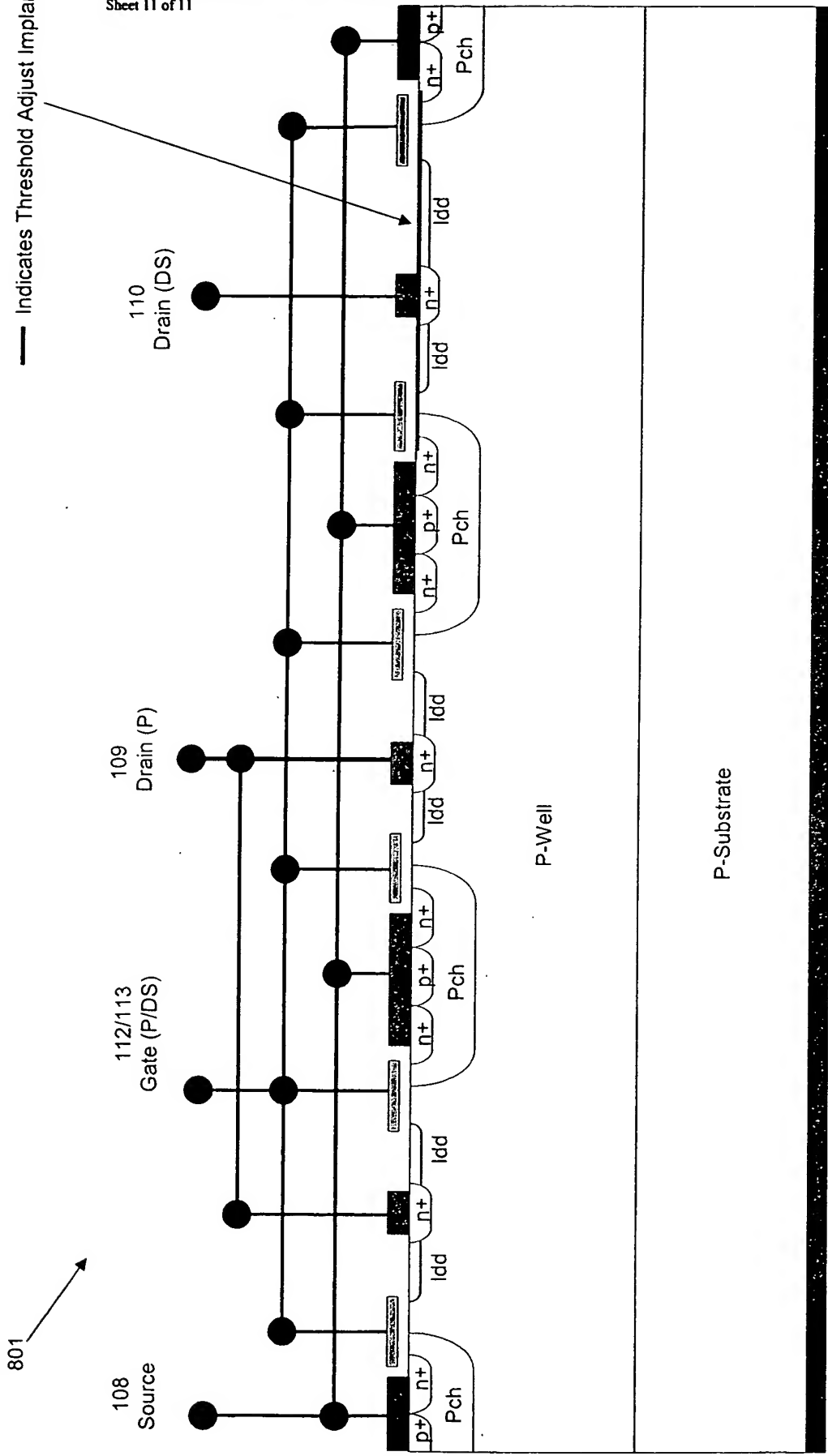


Figure 11
 Cross-Sectional Diagram of a Power MOSFET With Integrated Drain Sense